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PTO/SB/08a (08-03)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT BY  
APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

1

Application Number

10/792,323

Filing Date

March 3, 2004

First Named Inventor

Lawrence C. Lei

Group Art Unit

1734

Examiner Name

Sharon Latimer

Attorney Docket Number

AMAT/5191.C1/ISM/CORE/MCVD/PJS

Submission Date

December 30, 2004

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
SL	A1	US-20020009544	01/24/2002	McFeely, et al.	1-15 + - M
	A2				
	A3				
	A4				
	A5				
	A6				
	A7				
	A8				
	A9				
	A10				
	A11				

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
SL	B1	EP 1 079 001	02/28/2001	Morton International, Inc.		
SL	B2	GB 2 151 662	10/29/1984	N.V. Phillips' Gloeilampenfabrieken		
SL	B3	GB 2 223 509	10/04/1988	STC PLC		
SL	B4	JP 56 035426 A	04/08/1981	FUJITSU LTD		
	B5					

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
SL	C1	International Search Report from International Application No. PCT/US03/22186 (AMAT/6798-PC)	

Examiner

S. P.

Date Considered

6/20/05

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Substitute for form 1449A/PTO JUN 14 2004 <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		Application Number	10/792,323
		Filing Date	March 3, 2004
		First Named Inventor	Lawrence C. Lei
		Group Art Unit	Unknown
		Examiner Name	Unknown
		Attorney Docket Number	AMAT/5191.C1/ISM/CORE/MCVD/PJS
Sheet	1	of	11
		Submission Date	June 8, 2004

## U.S. PATENT DOCUMENTS

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		Number-Kind Code <sup>2</sup> (if known)				
SP	A1	US-20040015300 A1	01/22/2004	GANGULI, ET AL.	1-11	1-11
	A2	US-20040014320 A1	01/22/2004	CHEN, ET AL.		
	A3	US-20040013577 A1	01/22/2004	GANGULI, ET AL.		
	A4	US-20040011504 A1	01/22/2004	KU, ET AL.		
	A5	US-20040011404 A1	01/22/2004	KU, ET AL.		
	A6	US-20030224107 A1	12/04/2003	LINDFORS, ET AL.		
	A7	US-20030221780 A1	12/04/2003	LEI, ET AL.		
	A8	US-20030216981 A1	11/20/2003	TILLMAN		
	A9	US-20030213560 A1	11/20/2003	WANG, ET AL.		
	A10	US-20030198754 A1	10/23/2003	XI, ET AL.		
	A11	US-20030194493 A1	10/16/2003	CHANG, ET AL.		
	A12	US-20030172872 A1	09/18/2003	THAKUR, ET AL.		
	A13	US-20030153177 A1	08/14/2003	TEPMAN, ET AL.		
	A14	US-20030144657 A1	10/10/2002	CHIANG, ET AL.		
	A15	US-20030143747 A1	07/31/2003	BONDESTAM, ET AL.		
	A16	US-20030143328 A1	07/31/2003	CHEN, ET AL.		
	A17	US-20030140854 A1	07/31/2003	KILPI		
SL	A18	US-20030121608 A1	07/31/2003	CHEN, ET AL.		

## FOREIGN PATENT DOCUMENTS

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SL	B1	EP 1 167 569 A1	06/05/2001	IPS LIMITED		
SL	B2	GB 2 355 727 A	05/02/2001	SAMSUNG ELECTRONICS CO. LTD.		
SL	B3	JP 01-175225	07/11/1989	FUJITSU LTD		
SL	B4	JP 04-291916	09/23/1992	KOKUSAI ELECTRIC CO LTD		
SL	B5	JP 05-047666	02/26/1993	FUJITSU LTD		

Examiner

S. P.

Date Considered

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				First Named Inventor		Lawrence C. Lei	
				Group Art Unit		Unknown	
				Examiner Name		Unknown	
				Attorney Docket Number		AMAT/5191.C1/ISM/CORE/MCVD/PJS	
Sheet	2	of	11	Submission Date		June 8, 2004	

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SP	A19	US-20030121469 A1	07/03/2003	LINDFORS, ET AL.		
	A20	US-20030121241 A1	07/03/2003	BELKE		
	A21	US-20030116087 A1	06/26/2003	NGUYEN, ET AL.		
	A22	US-20030113187 A1	06/19/2003	LEI, ET AL.		
	A23	US-20030106490 A1	06/12/2003	JALLEPALLY, ET AL.		
	A24	US-20030101927 A1	06/05/2003	RAAIJMAKERS		
	A25	US-20030089308 A1	05/15/2003	RAAIJMAKERS		
	A26	US-20030082296	05/01/2003	ELERS, ET AL.		
	A27	US-20030079686 A1	05/01/2003	CHEN, ET AL.		
	A28	US-20030075925 A1	04/24/2003	LINDFORS, ET AL.		
	A29	US-20030075273 A1	04/24/2003	KILPELA, ET AL.		
	A30	US-20030072975	04/17/2003	SHERO, ET AL.		
	A31	US-20030072913 A1	04/17/2003	CHOU, ET AL.		
	A32	US-20030053799 A1	03/20/2003	LEI		
	A33	US-20030049942	03/13/2003	HAUKKA, ET AL.		
	A34	US-20030042630 A1	03/06/2003	BABCOKE, ET AL.		
	A35	US-20030031807	02/13/2003	ELERS, ET AL.		
SP	A36	US-20030023338 A1	01/30/2003	CHIN, ET AL.		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
SP	B6	JP 05-206036	08/13/1993	RIKAGAKU KENKYUSHO		
SP	B7	JP 05-234899	09/10/1993	HITACHI LTD		
SP	B8	JP 05-270997	10/19/1993	FUJITSU LTD		
SP	B9	JP 06-224138 (Abstract Only)	05/31/1994	TEXAS INSTRUMENTS INC (US)		
SP	B10	JP 06-317520	11/15/1994	HITACHI METALS LTD		

Examiner <u>S. P.</u>	Date Considered <u>8/20/05</u>
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# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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11

Application Number

10/792,323

Filing Date

March 3, 2004

First Named Inventor

Lawrence C. Lei

Group Art Unit

Unknown

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Unknown

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AMAT/5191.C1/ISM/CORE/MCVD/PJS

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		Number-Kind Code <sup>2</sup> (if known)					
JO	A37	US-20030013320	01/16/2003	KIM, ET AL	CIAT		SV
	A38	US-20030010451 A1	01/16/2003	TZU, ET AL			
	A39	US-20030004723 A1	01/02/2003	CHIHARA			
	A40	US-20020187256	12/12/2002	ELERS, ET AL			
	A41	US-20020182320	12/05/2002	LESKELA, ET AL			
	A42	US-20020177282	11/28/2002	SONG			
	A43	US-20020162506	11/07/2002	SNEH, ET AL			
	A44	US-20020155722	10/24/2002	SATTA, ET AL			
	A45	US-20020146511 A1	10/10/2002	CHIANG, ET AL			
	A46	US-20020144655 A1	10/10/2002	CHIANG, ET AL			
	A47	US-20020134307 A1	09/26/2002	CHOI			
	A48	US-20020127745 A1	09/12/2002	LU, ET AL			
	A49	US-20020121342 A1	09/05/2002	NGUYEN, ET AL			
	A50	US-20020108570 A1	08/15/2002	LINDFORS			
	A51	US-20020106536	08/08/2002	LEE, ET AL			
	A52	US-20020104481 A1	08/08/2002	CHIANG, ET AL			
	A53	US-20020098627	07/25/2002	POMAREDE, ET AL			
SP	A54	US-20020094689 A1	07/18/2002	PARK			

## FOREIGN PATENT DOCUMENTS

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SP	B11	JP 2000122725	04/28/2000	CKD CORP; TOSHIBA CORP		
JP	B12	JP 2000212752	11/12/2002	SAMSUNG ELECTRONICS CO LTD		
SP	B13	JP 2000319772 (Abstract Only)	03/28/2000	P K LTD		
SP	B14	JP 2001020075 (Abstract Only)	11/15/2000	ASM MICROCHEMISTRY OY		
SP	B15	JP 2001111000	12/26/2002			

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SQ	A55	US-20020092471 A1	07/18/2002	KANG, ET AL.		
	A56	US-20020086106 A1	07/04/2002	PARK, ET AL.		
	A57	US-20020076837	06/20/2002	HUJANEN, ET AL.		
	A58	US-20020076508 A1	06/20/2002	CHIANG, ET AL.		
	A59	US-20020076507 A1	06/20/2002	CHIANG, ET AL.		
	A60	US-20020076481 A1	06/20/2002	CHIANG, ET AL.		
	A61	US-20020073924 A1	06/20/2002	CHIANG, ET AL.		
	A62	US-20020066411 A1	06/06/2002	CHIANG, ET AL.		
	A63	US-20020052097 A1	05/02/2002	PARK		
	A64	US-20020048635	04/25/2002	KIM, ET AL.		
X	A65	US-20020041931 A1	04/11/2002	SUNTOLA, ET AL.		
	A66	US-20020041250	11/15/2001	WERKHOVEN, ET AL.		
	A67	US-20020031618	03/14/2002	SHERMAN		
	A68	US-20020021544	02/21/2002	CHO, ET AL.		
	A69	US-20020020869	02/21/2002	PARK, ET AL.		
	A70	US-20020007790 A1	01/24/2002	PARK, ET AL.		
	A71	US-20020000598	01/03/2002	KANG, ET AL.		
	A72	US-20020000196 A1	01/03/2002	PARK		

A73

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SQ	B16	JP 2001172767 A	06/26/2001	ASM MICROCHEMISTRY OY (US)		
	B17	JP 58-097917 (Abstract Only)	06/10/1983	MATSUSHITA DENKI SANGYO KK		
	B18	WO 00/16377	03/23/2000	GENITECH CO., LTD.		
	B19	WO 00/54320	09/14/2000	GENUS, INC.		
	B20	WO 00/79575 A1	12/28/2000	GENITECH, INC.		

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SD	A73	US-20010054769	12/27/2001	RAAJMAKERS, ET AL.				
	A74	US-20010054377 A1	12/27/2001	LINDFORS, ET AL.				
	A75	US-20010042799 A1	11/22/2001	KIM, ET AL.				
	A76	US-20010042523 A1	11/22/2001	KESALA				
	A77	US-20010034123	10/25/2001	JEON, ET AL.				
	A78	US-20010028924	10/11/2001	SHERMAN				
	A79	US-20010025979	10/04/2001	KIM, ET AL.				
	A80	US-20010024387	09/27/2001	RAAJMAKERS, ET AL.				
	A81	US-20010014371 A1	08/16/2001	KILPI				
	A82	US-20010013312 A1	08/16/2001	SOININEN, ET AL.				
	A83	US-20010011526 A1	08/09/2001	DOERING, ET AL.				
	A84	US-20010009695	07/26/2001	SAANILA, ET AL.				
	A85	US-20010009140 A1	07/26/2001	BONDESTAM, ET AL.				
	A86	US-20010002280	05/31/2001	SNEH				
	A87	US-20010000866 A1	05/10/2001	SNEH, ET AL.				
	A88	US-6660126 B2	12/09/2003	NGUYEN, ET AL.				
	A89	US-6630030 B1	10/07/2003	SUNTOLA, ET AL.				
HP	A90	US-6579372 B2	06/17/2003	PARK				

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
SP	B21	WO 0079576 A1	12/28/2000	GENITECH, INC.		
SP	B22	WO 01/15220 A1	03/01/2001	ASM AMERICA, INC.		
SP	B23	WO 01/17692 A1	03/15/2001	ASM AMERICA, INC.		
SP	B24	WO 01/27346 A1	04/19/2001	ASM MICROCHEMISTRY OY		
SP	B25	WO 01/27347 A1	04/19/2001	ASM MICROCHEMISTRY OY		

Examiner

LR

Date Considered

6/8/04

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PTO/SB/08a (08-03)

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# **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

6

of

11

Application Number

10/792,323

Filing Date

March 3, 2004

First Named Inventor

Lawrence C. Lei

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/5191.C1/ISM/CORE/MCVD/PJS

Submission Date

June 8, 2004

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
Q	A91	US-6578287 B2	06/17/2003	ASWAD	
	A92	US-6572705 B1	06/03/2003	SUNTOLA, ET AL	
	A93	US-6551406 B1	04/22/2003	KILPI	
	A94	US-6511539 B1	01/28/2003	RAAJMAKERS	
	A95	US-6482733	11/19/2002	RAAJMAKERS, ET AL	
	A96	US-6482262	11/19/2002	ELERS, ET AL	
	A97	US-6481945 B1	11/19/2002	HASPER, ET AL	
	A98	US-6478872 B1	11/12/2002	CHAE, ET AL	
	A99	US-6475910	11/05/2002	SNEH	
	A100	US-6475276	11/05/2002	ELERS, ET AL	
	A101	US-6468924	10/22/2002	LEE, ET AL	
	A102	US-6451695	09/17/2002	SNEH	
	A103	US-6451119	09/17/2002	SNEH, ET AL	
	A104	US-6447607 B2	09/10/2002	SOININEN, ET AL	
	A105	US-6416577	07/09/2002	SUNTOLOA, ET AL	
	A106	US-6399491	06/04/2002	JEON, ET AL	
	A107	US-6391785	05/21/2002	SATTA, ET AL	
JP	A108	US-6379748	04/30/2002	BHANDARI, ET AL	

## **FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
X	B26	WO 01/29280 A1	04/26/2001	ASM AMERICA, INC.		
JP	B27	WO 01/29891 A1	04/26/2001	ASM AMERICA, INC.		
JP	B28	WO 01/29893 A1	04/26/2001	ASM AMERICA, INC.		
JP	B29	WO 01/36702 A1	05/25/2001	GENITECH CO., LTD.		
JP	B30	WO 01/66832 A2	09/13/2001	ASM AMERICA, INC.		

Examiner

J. R.

Date Considered

6/24/05

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Substitute for form 1449A/PTO  <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/792,323		
		Filing Date	March 3, 2004		
		First Named Inventor	Lawrence C. Lei		
		Group Art Unit	Unknown		
		Examiner Name	Unknown		
		Attorney Docket Number	AMAT/5191.C1/ISM/CORE/MCVD/PJS		
Sheet	7	of	11	Submission Date	June 8, 2004

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code <sup>2</sup> (if known)				
JP	A109	US-6372598	04/16/2002	KANG, ET AL.		
	A110	US-6358829	03/19/2002	YOON, ET AL.		
	A111	US-6348376	02/19/2002	LIM, ET AL.		
	A112	US-6342277	01/29/2002	SHERMAN		
	A113	US-6306216 B1	10/23/2001	KIM, ET AL.		
	A114	US-6305314 B1	10/23/2001	SNEH, ET AL.		
	A115	US-6287965	09/11/2001	KANG, ET AL.		
	A116	US-6284646	09/04/2001	LEEM		
	A117	US-6270572 B1	08/07/2001	KIM, ET AL.		
	A118	US-6231672 B1	05/15/2001	CHOI, ET AL.		
	A119	US-6224681 B1	05/01/2001	SIVARAMAKRISHNAN, ET AL.		
	A120	US-6207487	03/27/2001	KIM, ET AL.		
	A121	US-6203613	03/20/2001	GATES, ET AL.		
	A122	US-6200893 B1	03/13/2001	SNEH		
	A123	US-6197683 B1	03/06/2001	KANG, ET AL.		
	A124	US-6183563 B1	02/06/2001	CHOI, ET AL.		
	A125	US-6174809	01/16/2001	KANG, ET AL.		
JP	A126	US-6174377 B1	01/16/2001	DOERING, ET AL.		

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
JP	B31	WO 02/08485 A2	01/31/2002	ASM INTERNATIONAL N.V.		
JP	B32	WO 02/08488 A1	01/31/2002	ASM MICROCHEMISTRY OY		
JP	B33	WO 02/43115 A2	05/30/2002	ASM AMERICA, INC.		
JP	B34	WO 02/45167 A2	06/06/2002	ASM MICROCHEMISTRY OY		
JP	B35	WO 02/45871 A1	06/13/2002	ANGSTRON SYSTEMS, INC.		

Examiner	S-R	Date Considered	6/12/04
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**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT BY  
APPLICANT**

(Use as many sheets as necessary)

Application Number	10/792,323
Filing Date	March 3, 2004
First Named Inventor	Lawrence C. Lei
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	AMAT/5191.C1/ISM/CORE/MCVD/PJS
Submission Date	June 8, 2004

Sheet 8 of 11

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
SL	A127	US-6162488	12/19/2000	GEVELBER, ET AL.	
	A128	US-6144060	11/07/2000	PARK, ET AL.	
	A129	US-6143080	11/07/2000	BARTHOLOMEW, ET AL.	
	A130	US-6139700	10/31/2000	KANG, ET AL.	
	A131	US-6139640	10/31/2000	RAMOS, ET AL.	
	A132	US-6136725	10/24/2000	LOAN, ET AL.	
	A133	US-6124158	09/26/2000	DAUTARTAS, ET AL.	
	A134	US-6084302	07/04/2000	SANDHU	
	A135	US-6072939	06/06/2000	ATWELL	
	A136	US-6042652	03/28/2000	HYUN, ET AL.	
	A137	US-6015917	01/18/2000	BHANDARI, ET AL.	
	A138	US-6015590	01/18/2000	SUNTOLA, ET AL.	
	A139	US-5968588	10/19/1999	SIVARAMAKRISHNAN, ET AL.	
	A140	US-5966499	10/12/1999	HINKLE, ET AL.	
	A141	US-5942089	08/24/1999	SPROUL, ET AL.	
	A142	US-5923056	07/13/1999	LEE, ET AL.	
	A143	US-5916365	06/29/1999	SHERMAN	
	A144	US-5879459	03/09/1999	GADGIL, ET AL.	
SL	A145	US-5855680	01/05/1999	SOININEN, ET AL.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
SL	B36	WO 96/17107	06/06/1996	MIKROKEMIA OY		
SL	B37	WO 99/01595	01/14/1999	NESTE OY		
SL	B38	WO 99/29924	06/17/1999	NESTE OYJ		
M	B39	WO 99/65064	12/16/1999	A.S.M. INTERNATIONAL N.V.		

Examiner

Date Considered

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**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT BY  
APPLICANT**

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Sheet 9

of

11

Application Number

10/792,323

Filing Date

March 3, 2004

First Named Inventor

Lawrence C. Lei

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/5191.C1/ISM/CORE/MCVD/PJS

Submission Date

June 8, 2004

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		Number-Kind Code <sup>2</sup> (if known)			
SR	A146	US-5835677	11/10/1998	LI, ET AL.	
	A147	US-5820678	10/13/1998	HUBERT, ET AL.	
	A148	US-5807792	09/15/1998	ILG, ET AL.	
	A149	US-5796116	08/18/1998	NAKATTA, ET AL.	
	A150	US-5764849	06/09/1998	ATWELL	
	A151	US-5730802	03/24/1998	ISHIZUMI, ET AL.	
	A152	US-5711811	01/27/1998	SUNTOLA, ET AL.	
	A153	US-5674786	10/07/1997	TURNER, ET AL.	
	A154	US-5674574	10/07/1997	ATWELL, ET AL.	
	A155	US-5645642	07/08/1997	NISHIZATO, ET AL.	
	A156	US-5630878	05/20/1997	MIYAMOTO, ET AL.	
	A157	US-5620524	04/15/1997	FAN, ET AL.	
	A158	US-5595803	01/21/1997	KLINEDINST, ET AL.	
	A159	US-5503875	04/02/1996	IMAI, ET AL.	
	A160	US-5496408	03/05/1996	MOTODA, ET AL.	
	A161	US-5483919	01/16/1996	YOKOYAMA, ET AL.	
	A162	US-5480818	01/02/1996	MATSUMOTO, ET AL.	
	A163	US-5447569	09/05/1995	HISKES, ET AL.	
	A164	US-5443647	08/22/1995	AUCOIN, ET AL.	
	A165	US-5441703	08/15/1995	JURGENSEN	
	A166	US-5377429	01/03/1995	SANDHU, ET AL.	
	A167	US-5374570	12/20/1994	NASU, ET AL.	
	A168	US-5354518	10/11/1994	TOMITA	
	A169	US-5338362	08/16/1994	IMAHASHI	
	A170	US-5294286	03/15/1994	NISHIZAWA, ET AL.	
	A171	US-5281274	01/25/1994	YODER	
	A172	US-5261959	11/18/1993	GASWORTH	
hp	A173	US-5225366	07/06/1993	YODER	

Examiner

S. R.

Date Considered

6/26/05

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

***(Use as many sheets as necessary)***

Sheet 10 of 11

<b>Application Number</b>	10/792,323
<b>Filing Date</b>	March 3, 2004
<b>First Named Inventor</b>	Lawrence C. Lei
<b>Group Art Unit</b>	Unknown
<b>Examiner Name</b>	Unknown
<b>Attorney Docket Number</b>	AMAT/5191.C1/ISM/CORE/MCVD/PJS
<b>Submission Date</b>	June 8, 2004

[illegible]

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>o</sup>
		Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>4</sup> (if known)				
	B46					
	B47					
	B48					
	B49					
	B50					

Examiner S. J. C.

### Data Considered

8/21/05

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Substitute for form 1449B/PTO  <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/792,323		
		Filing Date	March 3, 2004		
		First Named Inventor	Lawrence C. Lei		
		Group Art Unit	Unknown		
		Examiner Name	Unknown		
		Attorney Docket Number	AMAT/5191.C1/ISM/CORE/MCVD/PJS		
Sheet	11	of	11	Submission Date	June 8, 2004

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
sf	C1	Kukli, <i>et al.</i> , "Tailoring the Dielectric Properties of HfO <sub>2</sub> -Ta <sub>2</sub> O <sub>5</sub> Nanolaminates," Applied Physics Letters, Vol. 68, No. 26, June 24, 1996; p. 3737-9	
sf	C2	Kukli, <i>et al.</i> "Atomic Layer Epitaxy Growth of Tantalum Oxide Thin Films from Ta(OC <sub>2</sub> H <sub>5</sub> ) <sub>5</sub> and H <sub>2</sub> O," Journal of the Electrochemical Society, Vol. 142, No. 5, May 1995; p. 1670-5	
sf	C3	Kukli, <i>et al.</i> , "In situ Study of Atomic Layer Epitaxy Growth of Tantalum Oxide Thin Films From Ta(OC <sub>2</sub> H <sub>5</sub> ) <sub>5</sub> and H <sub>2</sub> O," Applied Surface Science, Vol. 112, March 1997, p. 236-42	
sf	C4	Kukli, <i>et al.</i> , "Properties of Ta <sub>2</sub> O <sub>5</sub> -Based Dielectric Nanolaminates Deposited by Atomic Layer Epitaxy," Journal of the Electrochemical Society, Vol. 144, No. 1, Jan. 1997; p. 300-6	
sf	C5	Kukli, <i>et al.</i> , "Properties of (Nb <sub>1-x</sub> Ta <sub>x</sub> ) <sub>2</sub> O <sub>5</sub> Solid Solutions and (Nb <sub>1-x</sub> Ta <sub>x</sub> ) <sub>2</sub> O <sub>5</sub> -ZrO <sub>2</sub> Nanolaminates Grown by Atomic Layer Epitaxy," 1997; p. 785-93.	
sf	C6	Ritala, M., <i>et al.</i> , "Chemical Vapor Deposition," January 1999, p. 6-9	
sf	C7	Rosnagel, <i>et al.</i> "Plasma-enhanced Atomic Layer Deposition of Ta and Ti for Interconnect Diffusion Barriers," J. Vac. Sci. Technol. B., Vol. 18, No. 4 (July 2000); p2016-20	
sf	C8	Niinisto, <i>et al.</i> "Synthesis of Oxide Thin Films and Overlayers by Atomic Layer Epitaxy for Advanced Applications," Materials Science and Engineering B41 (1996) 23-29	
sf	C9	Eisenbraun, <i>et al.</i> "Atomic Layer Deposition (ALD) of Tantalum-based materials for zero thickness copper barrier applications," Proceedings of the IEEE 2001 International Interconnect Technology Conference (Cat. No. 01EX461) 2001	

Examiner	S. R.	Date Considered	6/10/04
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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